UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,664	06/28/2001	Steven G. Smith	20009.0132US01(00353)	2057

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ARMSTRONG, ANGELA A

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/892,664	SMITH ET AL.
	Examiner	Art Unit	
	Angela A. Armstrong	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>6/5/07</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-3,7,9-12,16-18 and 20</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-3,7,9-12,16-18 and 20</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some *   c) ☐ None of:

         1. ☐ Certified copies of the priority documents have been received.

         2. ☐ Certified copies of the priority documents have been received in Application No. _____.

         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

2.   Claims 1-3, 7, 9-12, 16-18 and 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Pearson (US 6,023,684) in view of Giangarra et al (U.S. Patent 6,101,472) and

further in view of Brown et al (US Patent No. 6,587,822).

3.   Regarding claims 1 and 7 Pearson reads on the features of a system for permitting a user

to remotely access data as follows: Pearson reads on the feature of a systems interface to a

plurality of legacy systems (column 1 lines 7-8), the systems interface comprising a first server

for managing for protocol (done by the Web Server 50 in figure 2) and a 2nd server for

generating legacy transactions (done by the Application Server 56 in figure 2) and a firewall that

protects the first server and the second server (firewall 54 and filtering router 44);

Pearson reads on the feature of a computer operable by the user to access data from the

legacy systems through the systems interface (depicted in figure 2 as the process path 28-34-44-

50-56-58-60), where the computer is programmed with a client application for accessing the

systems interface (as happens when a client program initiates a logical session to access the

system, column 4 lines 22- 24), and where the client application is adapted to format requests for

information based on user input (column 4 lines 28-30);

With regard to the singular feature that is particular to claim 7, Pearson reads on the feature of a communications link coupling the computer and the means for providing an interface (column 7 lines 37-39).

Regarding the further limits of the claims, the VRU of Pearson lists the considerations required for voice processing in promotion of his invention (column 2 lines 28 - column 3 line 32) without expressly teaching away from the feature so that his invention in turn could use speech recognition. Consequently Pearson teaches the feature of a voice input device coupled to the computer (the VRU of column 2 lines 29- 33), which satisfies the requirement of claim 16, but does not provide for the further feature of claims 1 and 7, of receiving voice. Pearson does not teach the specifics of multiple operations, a graphical user interface that has a page for selecting one of the multiple operations or the specifics of the speech recognition application with voice module that accesses a stored separate vocabulary for each of the pages for selecting and performing the multiple operations utilized for generating the legacy transactions on the legacy system.

Giangarra discloses a voice command interface in a data processing system and method are implemented to allow a user to speak a name of a link identified by Hypertext Markup Language (HTML) format to receive a desired web page from a communication network, such as the Internet. During operation of the data processing system and method for implementing the voice command interface, a client computer accesses a current web page using a server. When a new web page is accessed, a central processing unit in the data processing system provides control signals to a speech recognition unit to clear a vocabulary list currently stored within the speech recognition unit. Subsequently, the central processing unit commences to parse the

HTML source code corresponding to the accessed web page. The central processing unit then

determines whether the accessed web page has any links therein. If the web page does have links,

the central processing unit detects those links during a parsing operation and enables the speech

recognition unit to store the text displayed to an external user, which corresponds to the link in a

special vocabulary list of the speech recognition unit. If new links are displayed, the recognition

unit stores the text associated with the link in a vocabulary file, which reads on a stored separate

vocabulary. A user is then able to provide a voice command to access the link by speaking the

text stored within the special vocabulary list. Upon speaking that text, the central processing unit

accesses a web page corresponding to the link identified by the text (Figures 6-12; col. 5, lines

25-46; col. 6, lines 32-61; col. 7, line 66 to col.8, line 8). It would have been obvious to a person

of ordinary skill in the art of speech signal processing at the time of the invention to apply the

method and/or teachings of Giangarra et al to the device/method of Pearson so as to realize the

advantage of speech input using a microphone or a telephone.

Pearson does not specifically disclose systems, selecting the multiple operations

comprises utilizing the voice input for navigating to a search page and selecting an operation for

retrieving client account information, and wherein performing the multiple operations

comprises inputting the client account information to complete at least one of the plurality of

data fields, wherein inputting the client account information to complete at least one of the

plurality of data fields comprises utilizing the voice input to navigate among the plurality of

data fields. Brown discloses (col. 8, line 12 continuing to col. 9, line 12; col. 11, lines 18-58) a

web-based platform for an interactive voice response system in which the user is able to

navigate the web pages, tables and forms via voice and input data into data fields for searching

or submitting other information all by voice input. It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Pearson to implement the navigation and speech input data entry features as taught by Brown for the purpose of enabling the user the capabilities to easily enter data and navigate the system so as to realize the advantages of speech input using the microphone or a telephone.

4.   Regarding claim 2, the claim is set forth with the same limits as claim 1. Pearson (column 8 lines 1 8-34) reads on the feature that the computer logs into the first server over a wireless communications network (the "other physical connecting configuration" of line 23 column 8) of which special notice is provided that wireless communication was well-known in the form of cellular and cordless telephones and so would have been obvious to a person of ordinary skill in the ad of speech signal processing at the time of the invention to apply as a methods of initiating communication between the user computer/client and the host server/mainframe.

5.   Regarding claim 3, the claim is set forth with the same limits as claim 1. Pearson reads on the feature that the computer logs into the first server (with the procedures in column 8 lines 25-34) over a wire line communications network (from phone to mainframe, column 1 lines 30-33).

6.   Regarding claim 9, the claim is set forth with the same limits as claim 7. Pearson reads on the feature that user requests are processed by the means for providing an interface in order to generate legacy transactions (done by the Application Server 56 in figure 2).

7.   Regarding claim 10, the claim is set forth with the same limits as claim 7. Pearson reads on the feature of a protocol server (the Web Server 50 in figure 2) and a transaction server (the Application Server 56 in figure 2).

8.   Regarding claim 11, the claim is set forth with the same limits as claim 7. Pearson reads

on the features that the protocol server receives the user requests (from 28 in figure 2) and

forwards the user requests to the transaction server (50-56 in figure 2), and wherein the

transaction server generates legacy transactions based on the user requests (56-58 in figure 2),

receives the requested information based on the legacy transactions (56-58 in figure 2), and

forwards the requested information to the protocol server (50-56 in figure 2).

9.   Regarding claim 12 as understood by the Examiner, Pearson reads on the features for a

system for remotely accessing legacy data through a systems interface to a plurality of legacy

systems (28-34-44-50-56-58/60 in figure 2) as follows:

        Pearson reads on the feature of a voice input device (VRU of column 2 lines 29-33);

        Pearson reads on the feature of a modem (column 1 lines 59-67);

        Pearson reads on the feature of a systems interface in communications with the plurality

        of legacy systems, wherein the systems interface is protected from the legacy systems by

        a firewall (firewall 54 and filtering router 44);

        Pearson reads on the feature of a computer (28 in figure 2) that includes at least one

memory programmed with software for performing the following: the VRU of Pearson presents

considerations required for voice processing in promotion of his invention (column 2 lines 28 -

column 3 line 32) without expressly teaching away from the feature so that his invention in turn

could use speech recognition. Consequently, Pearson teaches the feature of software for

receiving request to input by voice. Pearson does not teach the specifics of multiple operations, a

graphical user interface that has a page for selecting one of the multiple operations or the

specifics of the speech recognition application with voice module for each page corresponding to the multiple operations provided by the server.

Giangarra discloses a voice command interface in a data processing system and method are implemented to allow a user to speak a name of a link identified by Hypertext Markup Language (HTML) format to receive a desired web page from a communication network, such as the Internet. During operation of the data processing system and method for implementing the voice command interface, a client computer accesses a current web page using a server. When a new web page is accessed, a central processing unit in the data processing system provides control signals to a speech recognition unit to clear a vocabulary list currently stored within the speech recognition unit. Subsequently, the central processing unit commences to parse the HTML source code corresponding to the accessed web page. The central processing unit then determines whether the accessed web page has any links therein. If the web page does have links, the central processing unit detects those links during a parsing operation and enables the speech recognition unit to store the text displayed to an external user, which corresponds to the link in a special vocabulary list of the speech recognition unit. If new links are displayed, the recognition unit stores the text associated with the link in a vocabulary file, which reads on a stored separate vocabulary. A user is then able to provide a voice command to access the link by speaking the text stored within the special vocabulary list. Upon speaking that text, the central processing unit accesses a web page corresponding to the link identified by the text (Figures 6-12; col. 5, lines 25-46; col. 6, lines 32-61; col. 7, line 66 to col.8, line 8). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the

method and/or teachings of Giangarra et al to the device/method of Pearson so as to realize the advantage of speech input using a microphone or a telephone.

Pearson does not specifically disclose systems, selecting the multiple operations comprises utilizing the voice input for navigating to a search page and selecting an operation for retrieving client account information, and wherein performing the multiple operations comprises inputting the client account information to complete at least one of the plurality of data fields, wherein inputting the client account information to complete at least one of the plurality of data fields comprises utilizing the voice input to navigate among the plurality of data fields. Brown discloses (col. 8, line 12 continuing to col. 9, line 12; col. 11, lines 18-58) a web-based platform for an interactive voice response system in which the user is able to navigate the web pages, tables and forms via voice and input data into data fields for searching or submitting other information all by voice input. It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Pearson to implement the navigation and speech input data entry features as taught by Brown for the purpose of enabling the user the capabilities to easily enter data and navigate the system so as to realize the advantages of speech input using the microphone or a telephone.

10.   Regarding claim 16, Pearson, with the invention for a 3-tier financial transaction system, reads on the claim for a method for allowing a user to access data as follows:

Pearson teaches the feature of logging onto a systems interface to legacy systems (by initiating a session column 4 line 23);

Pearson teaches the feature of receiving voice inputs (with the VRU col. 1 lines 28-32);

Pearson teaches the feature of converting the voice inputs to a user request (column 1 lines 36-42);

Pearson teaches on the feature of sending the user request to the systems interface (column 1 lines 42-45); and

Pearson reads on the feature of receiving data from the systems interface in response to the user request (column 1, lines 48-49).

Pearson does not teach the legacy system comprises at least one of a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, and a work activity statistical sampling plan. However, providing a legacy system which comprises one of a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, and a work activity statistical sampling plan, was well known in the art, as indicated by applicant's admitted prior art (see specification, pages 1 to 2). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Pearson for implementation in which the legacy system comprises a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, a work activity statistical sampling plan or other systems that allows user access to the legacy database, so as to provide a system that supports real time execution of user transaction commands that require data from more than one legacy database and which provides users with real time access and execution of transaction

commands over an open network without modifying a legacy database management system to support an increased number of users, as suggested by Pearson (see col. 3, lines 59-67).

The VRU of Pearson presents considerations required for voice processing in promotion of his invention (column 2 lines 28 - column 3 line 32) without expressly teaching away from the feature so that his invention in turn could use speech recognition. Consequently, Pearson teaches the feature of software for receiving request to input by voice. Pearson does not teach the specifics of multiple operations, a graphical user interface that has a page for selecting one of the multiple operations or the specifics of the speech recognition application with voice module for each page corresponding to the multiple operations provided by the server.

Giangarra discloses a voice command interface in a data processing system and method are implemented to allow a user to speak a name of a link identified by Hypertext Markup Language (HTML) format to receive a desired web page from a communication network, such as the Internet. During operation of the data processing system and method for implementing the voice command interface, a client computer accesses a current web page using a server. When a new web page is accessed, a central processing unit in the data processing system provides control signals to a speech recognition unit to clear a vocabulary list currently stored within the speech recognition unit. Subsequently, the central processing unit commences to parse the HTML source code corresponding to the accessed web page. The central processing unit then determines whether the accessed web page has any links therein. If the web page does have links, the central processing unit detects those links during a parsing operation and enables the speech recognition unit to store the text displayed to an external user, which corresponds to the link in a special vocabulary list of the speech recognition unit.   If new links are displayed, the recognition

unit stores the text associated with the link in a vocabulary file, which reads on a stored separate

vocabulary. A user is then able to provide a voice command to access the link by speaking the

text stored within the special vocabulary list. Upon speaking that text, the central processing unit

accesses a web page corresponding to the link identified by the text (Figures 6-12; col. 5, lines

25-46; col. 6, lines 32-61; col. 7, line 66 to col.8, line 8). It would have been obvious to a person

of ordinary skill in the art of speech signal processing at the time of the invention to apply the

method and/or teachings of Giangarra et al to the device/method of Pearson so as to realize the

advantage of speech input using a microphone or a telephone.

Pearson does not specifically disclose systems, selecting the multiple operations

comprises utilizing the voice input for navigating to a search page and selecting an operation for

retrieving client account information, and wherein performing the multiple operations comprises

inputting the client account information to complete at least one of the plurality of data fields,

wherein inputting the client account information to complete at least one of the plurality of data

fields comprises utilizing the voice input to navigate among the plurality of data fields. Brown

discloses (col. 8, line 12 continuing to col. 9, line 12; col. 11, lines 18-58) a web-based platform

for an interactive voice response system in which the user is able to navigate the web pages,

tables and forms via voice and input data into data fields for searching or submitting other

information all by voice input. It would have been obvious to one of ordinary skill at the time of

the invention to modify the system of Pearson to implement the navigation and speech input data

entry features as taught by Brown for the purpose of enabling the user the capabilities to easily

enter data and navigate the system so as to realize the advantages of speech input using the

microphone or a telephone.

11.   Regarding claim 17, the claim is set forth with the same limits as claim 16. Pearson

teaches the limitations of the feature for receiving a request for input by voice with the VRU

(column 2 lines 28 - column 3 line 32). Without teaching away from the first feature, Pearson

does not mention speech recognition. Giangarra discloses the central processing unit detects

those links during a parsing operation and enables the speech recognition unit to store the text

displayed to an external user, which corresponds to the link in a special vocabulary list of the

speech recognition unit. A user is then able to provide a voice command to access the link by

speaking the text stored within the special vocabulary list. Upon speaking that text, the central

processing unit accesses a web page corresponding to the link identified by the text (Figures 6-

12; col. 5, lines 25-46; col. 6, lines 32-61; col. 7, line 66 to col.8, line 8). It would have been

obvious to a person of ordinary skill in the art of speech signal processing at the time of the

invention to apply the method and/or teachings of Giangarra et al to the device/method of

Pearson so as to realize the advantage of speech input using a microphone or a telephone.

12.   Regarding claim 18, the claim is set forth with the same limits as claim 16. Pearson

teaches the limitations of converting the voice inputs to user inputs (column 1, lines 36-41) and

converting the user inputs into the user request (column 1, lines 42-45).

13.   Regarding claim 20, the claim is set forth with the same limits as claim 18. Pearson reads

on the feature of a protocol server (the Web Server 50 in figure 2) and a transaction server (the

Application Server 56 in figure 2).

Response to Arguments

Applicant's arguments with respect to claims 1-3, 7, 9-12, 16-18 and 20 have been

considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
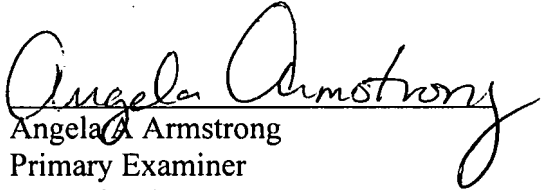
A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598.

The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Angela A Armstrong
Primary Examiner
Art Unit 2626

AAA
June 21, 2007